

**Report from the**  
**LOUISIANA**  
**HEALTHY HOMES AND BLOOD LEAD SURVEILLANCE SYSTEM (HHLPSS) 2011**

**From**  
**Louisiana Healthy Homes and Lead Poisoning Prevention Program**

## Introduction

The surveillance component of the Louisiana Healthy Homes and Lead Poisoning Prevention Program (HHLPPP), the Healthy Homes and Blood Lead Surveillance System (HHLPSS), collects information about blood lead tests conducted on child residents of Louisiana between the ages of six and 72 months, inclusive. Data is collected from several private laboratories that conduct lead analysis for Louisiana children. The HHLPSS has as its primary goal the collection of *all* blood lead test results for children in the target age range in Louisiana. The data is compiled and analyzed to support outreach and prevention efforts, screening recommendations, and resource allocation.

The “Report from the Healthy Homes and Blood Lead Surveillance System (HHLPSS) 2011”, presents screening and prevalence of elevated lead levels for state and parishes using data collected from several private laboratories.

This report presents surveillance data for children in Louisiana who had blood lead tests during 2011. Records were included in this analysis if the child was between the ages of six and 72 months and the record contained residential information indicating the child lived in Louisiana at the time of the test. All addresses were geocoded and county FIPS codes were assigned using Melissa data. Each child contributed only one lead result to the analysis. For children with multiple lead tests during 2011, the highest lead result was included in the final dataset. Both venous and capillary results are included. In the combined report, 3.4% of the samples were venous specimens, 75% were capillary specimens, and the specimen type was unknown for 21.6%.

Screening estimates were calculated as the number of children screened in an area divided by the population estimate of children aged six to 72 months for the same area, obtained from the 2010 Census data. To determine the population of children aged six to twelve months, the Census population estimate of children under one year of age was divided in half for each Parish.

The combined dataset for 2011 consists of lead results for 57278 children, representing an overall screening rate in Louisiana of 16.4%. In the dataset 675 children were found to have an elevated blood lead level ( $\geq 10\mu\text{g/dl}$ ).

Screening rates between parishes within the state are highly variable. Parishes with higher screening rates and larger numbers of children screened have more stable estimates of the prevalence of elevated lead levels than those with lower screening rates, or with very few children screened. Prevalence estimates of elevated lead levels for a parish in which 30% of the children were screened are much more reliable than rates for parishes in which only 2% of the children were screened. Similarly, an estimate of prevalence of elevated lead levels of 25% is much more stable if it represents 100 elevated results out of 400 children screened than if it represents two elevated results out of eight children screened. This issue should be kept in mind when reviewing or interpreting the information contained herein. Review of the estimates of prevalence of elevated lead levels by parish should consider both the number of children screened and the screening rate for the parish.

# State of Louisiana

## Summary of Activity - 2010 and 2011 Data

	2010 Data	2011 Data
Population of children <sup>ii</sup> 6 and under	329858	349621
Total children <sup>i</sup> screened	73770	57278
Proportion of children screened	21.1%	16.4%
Total children elevated ( $\geq 10$ $\mu\text{g}/\text{dl}$ )	823	675

## Characteristic of Children<sup>i</sup> Screened - 2010 and 2011 Data

Characteristic		2010 data (n=73770)		2011 data (n=57278)	
Gender	Male	37178	50.4%	29326	51.2%
	Female	34277	46.5%	26806	46.8%
	Missing	2315	3.1%	1146	2%
Race	Black	14145	19.2%	10826	18.8%
	White	10460	14.2%	7675	13.4%
	Other	1560	2.1%	1890	3.3%
	Missing	47605	64.5%	36887	64.4%
Age (Months)	6 to 11	2187	3.0%	1823	3.2%
	12 to 35	51394	69.8%	39751	69.4%
	36 to 72	20089	27.2%	15704	27.4%

## Characteristic of Children<sup>i</sup> with elevated Blood Lead levels-2010 and 2011 Data

Characteristic		2009 data (n=1078)				2010 data (n=1078)			
		$\geq 10$ and $<15$ $\mu\text{g}/\text{dl}$	$\geq 15$ and $<20$ $\mu\text{g}/\text{dl}$	$\geq 20$ $\mu\text{g}/\text{dl}$	Total	$\geq 10$ and $<15$ $\mu\text{g}/\text{dl}$	$\geq 15$ and $<20$ $\mu\text{g}/\text{dl}$	$\geq 20$ $\mu\text{g}/\text{dl}$	Total
Gender	Male	289	187	95	471	212	137	55	404
	Female	201	70	64	335	149	69	37	255
	Missing	8	4	2	14	10	5	1	16
Race	Black	111	45	26	182	81	61	10	152
	White	45	17	16	77	38	21	4	63
	Other	9	1	8	18	10	12	8	30
	Missing	340	95	110	545	242	117	71	430
Age (Months)	6 to 11	5	2	4	11	4	4	1	5
	12 to 35	318	95	112	525	232	132	63	427
	36 to 72	182	61	44	287	135	75	29	239
Total		505	158	160	823	371	211	93	675

<sup>i</sup> Children age 6 to 72 months screened at the State Public Health Lab or Private Labs in 2010 and 2011

<sup>ii</sup> Population estimates of children age 6 to 72 months residing in the parish indicated are taken from 2010 American Census Data

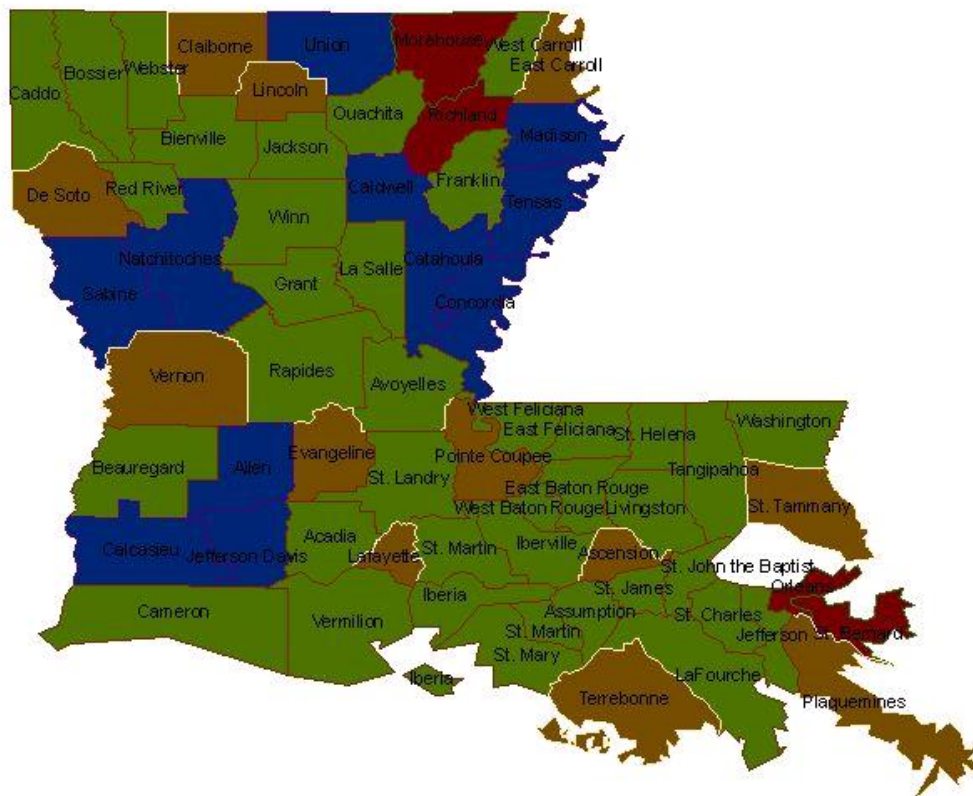
## Summary of the Number of Children with Elevated Blood Lead Levels by Parish 2011 Data

Parish	Population of children 6 and under	2011 Data						Total elevated (%)
		Total Tested (n)	Total test (%)	10-14.9	15-19.9	≥ 20	≥10	
				µg/dl				
Acadia	5001	570	11.4%	4	3	3	10	1.8%
Allen	1843	388	21.1%	1	1	0	2	0.5%
Ascension	8261	562	6.8%	2	2	1	5	0.9%
Assumption	1510	169	11.2%	1	0	0	1	0.6%
Avoyelles	3350	473	14.1%	4	4	0	8	1.7%
Beauregard	2811	312	11.1%	0	1	1	2	0.6%
Bienville	1216	187	15.4%	1	1	0	2	1.1%
Bossier	9084	994	10.9%	4	2	2	8	0.8%
Caddo	19821	2541	12.8%	11	7	1	19	0.7%
Calcasieu	14523	3091	21.3%	4	4	2	10	0.3%
Caldwell	751	160	21.3%	3	2	0	5	3.1%
Cameron	583	85	14.6%	1	1	0	2	2.4%
Catahoula	822	181	22.0%	2	1	0	3	1.7%
Claiborne	1227	102	8.3%	4	2	0	6	5.9%
Concordia	1786	382	21.4%	3	1	1	5	1.3%
De Soto	1934	175	9.0%	0	1	0	1	0.6%
East Baton Rouge	32575	5408	16.6%	29	14	11	54	1.0%
East Carroll	884	85	9.6%	1	1	0	2	2.4%
East Feliciana	1436	196	13.6%	1	1	0	2	1.0%
Evangeline	3763	225	6.0%	3	1	0	4	1.8%
Franklin	1684	334	19.8%	4	4	1	9	2.7%
Grant	1656	190	11.5%	2	1	2	5	2.6%
Iberia	6058	624	10.3%	2	2	1	5	0.8%
Iberville	2305	357	15.5%	4	2	2	8	2.2%
Jackson	1167	146	12.5%	0	1	1	2	1.4%
Jefferson Davis	2372	493	20.8%	5	4	2	11	2.2%
Jefferson	30434	6029	19.8%	20	12	10	42	0.7%
La Salle	1017	141	13.9%	2	2	0	4	2.8%
Lafayette	16413	1608	9.8%	6	4	1	11	0.7%
Lafourche	6435	1088	16.9%	3	2	1	6	0.6%
Lincoln	2964	274	9.2%	1	2	0	3	1.1%
Livingston	7881	1152	14.6%	4	3	1	8	0.7%
Madison	1285	257	20.0%	1	0	0	1	0.4%

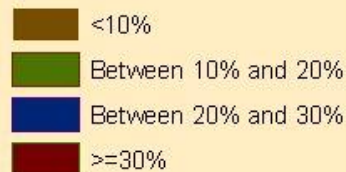
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Parish	Population of children 6	2011 Data						Total elevated
		Total Tested (n)	Total test (%)	10-14.9	15-19.9	≥ 20	≥10	
				μg/dl				
Morehouse	2080	717	34.5%	8	5	1	14	2.0%
Natchitoches	3183	689	21.6%	1	2	0	3	0.4%
Orleans	16797	5879	35.0%	107	42	10	159	2.7%
Ouachita	12102	2143	17.7%	10	7	6	23	1.1%
Plaquemines	1713	159	9.3%	2	1	0	3	1.9%
Pointe Coupee	1635	121	7.4%	0	1	0	1	0.8%
Rapides	10436	1320	12.6%	10	8	4	22	1.7%
Red River	888	91	10.2%	2	1	0	3	3.3%
Richland	1539	552	35.9%	5	2	0	7	1.3%
Sabine	1815	445	24.5%	4	2	0	6	1.3%
St. Bernard	1533	497	32.4%	3	2	0	5	1.0%
St. Charles	3842	757	19.7%	1	3	0	4	0.5%
St. Helena	854	150	17.6%	2	1	0	3	2.0%
St. James	1600	254	15.9%	3	2	0	7	2.8%
St. John the Baptist	3853	638	16.6%	4	1	3	8	1.3%
St. Landry	7787	1278	16.4%	4	4	3	14	1.1%
St. Martin	4034	473	11.7%	2	1	0	3	0.6%
St. Mary	4127	709	17.2%	5	2	0	7	1.0%
St. Tammany	16753	1589	9.5%	6	4	2	12	0.8%
Tangipahoa	9549	1230	12.9%	7	5	1	13	1.1%
Tensas	527	117	22.2%	1	2	0	3	2.6%
Terrebonne	9126	638	7.0%	4	1	1	6	0.9%
Union	1647	335	20.3%	1	1	0	2	0.6%
Vermilion	4186	749	17.9%	1	1	0	2	0.3%
Vernon	4713	271	5.8%	2	2	0	4	1.5%
Washington	3464	467	13.5%	3	3	0	6	1.3%
Webster	2885	506	17.5%	3	0	1	4	0.8%
West Baton Rouge	1675	199	11.9%	3	0	1	4	2.0%
West Carroll	897	168	18.7%	0	1	1	2	1.2%
West Feliciana	826	122	14.8%	1	0	0	2	1.6%
Winn	1322	206	15.6%	0	1	0	1	0.5%

## Distribution of Blood Lead Screened Rates by Parish 2011 Data

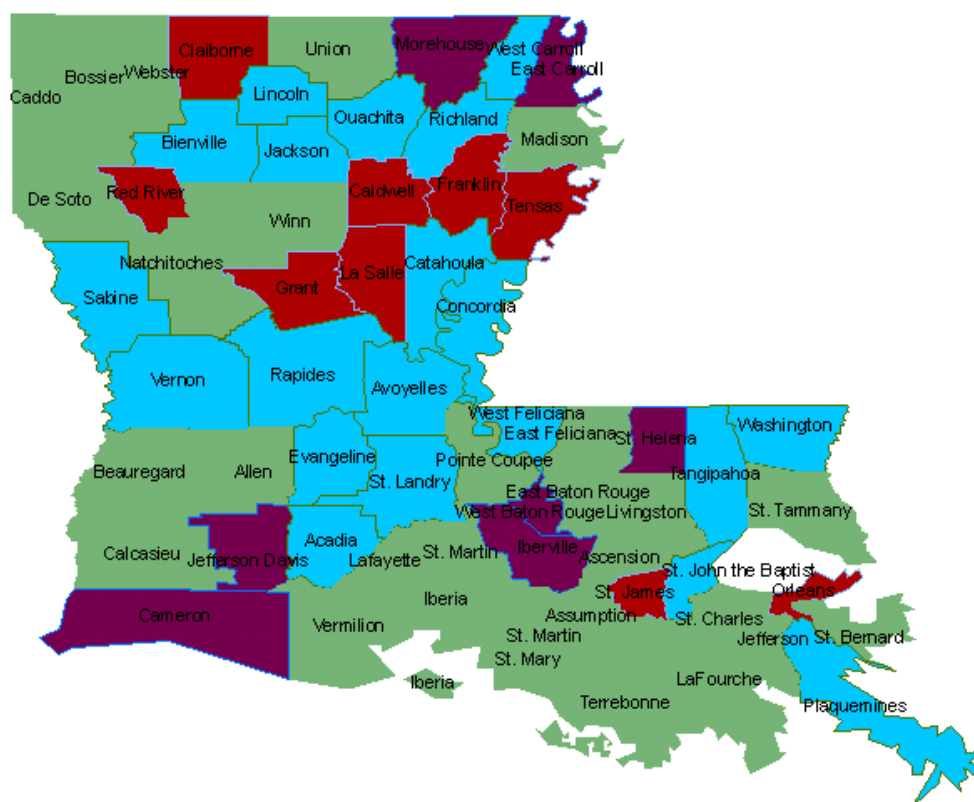


### Screened Percent





## Distribution of Blood Lead Elevated Rates by Parish 2011 Data



### Elevated Percent

